

What is claimed is:

1. A process for producing a biodegradable polymer having a free carboxyl group at the  $\omega$ -end comprising:

5       subjecting a cyclic ester compound to a polymerization reaction in the presence of a hydroxymonocarboxylic acid derivative in which the carboxyl group is protected, or a hydroxydicarboxylic acid derivative in which the carboxyl groups are protected, and

10       subjecting the resulting polymer having a protected carboxyl group at the  $\omega$ -end to a deprotecting reaction.

2. The process according to claim 1, wherein the hydroxymonocarboxylic acid derivative in which the carboxyl group is protected is glycolic acid in which the carboxyl group is protected, L-lactic acid in which the carboxyl group is protected, D-lactic acid in which the carboxyl group is protected, or DL-lactic acid in which the carboxyl group is protected.

3. The process according to claim 1, wherein the protecting group of the hydroxymonocarboxylic acid in which the carboxyl group is protected is a tert-butyl group or benzyl group.

4. The process according to claim 1, wherein the hydroxydicarboxylic acid derivative in which the carboxyl groups are protected is dibenzyl tartronate or di-tert-

butyl 2-hydroxyethylmalonate.

5. The process according to claim 1, wherein the cyclic ester compound is a cyclic monoester compound or a cyclic diester compound.

5 6. The process according to claim 1, wherein the deprotecting reaction is an acidolysis reaction.

7. A process for producing a biodegradable polymer having a free carboxyl group at the  $\omega$ -end comprising:

10 subjecting a cyclic ester compound to a polymerization reaction in the presence of a hydroxymonocarboxylic acid derivative in which the carboxyl group is protected, and

subjecting the resulting polymer having a protected carboxyl group at the  $\omega$ -end to a deprotecting reaction.

15 8. The process according to claim 7, wherein an acid hydrolysis reaction is carried out following the deprotecting reaction.

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20 9. The process according to claim 1 or 7, wherein the biodegradable polymer is a biodegradable polymer that is used in a sustained-release preparation that releases a physiologically active substance over the course of at least about six months.

10. A biodegradable polymer obtained by the production process as set forth in claim 1 or 7.

25 11. A sustained-release preparation containing the biodegradable polymer as set forth in claim 10.

12. The sustained-release preparation according to claim 11 further containing a physiologically active substance.

5 13. The sustained-release preparation according to claim 12, wherein the physiologically active substance is an LH-RH derivative or its salt.

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